

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended): An aircraft navigation aid method, ~~characterized in that it comprising~~ comprises the following steps consisting in: of:

a) defining an area to be sensed to the right and to the left of a first hypothetical path of the aircraft, designated the feeler line support path,

b) sensing, for each of the two areas to be sensed to the right and to the left, a corresponding predefined underlying relief, in order to identify dangerous sub-zones to the right and/or to the left,

c) computing, for each of the dangerous sub-zones to the right and/or to the left, a time ΔT remaining to begin an avoidance maneuver before a point of no return, and determining for the dangerous sub-zones to the right a minimum ΔT denoted ΔT right and/or for the dangerous sub-zones to the left a minimum ΔT denoted ΔT left,

d) establishing a navigation aid from ΔT right and/or ΔT left.

2. (currently amended): The method as claimed in ~~the preceding~~ claim 1, ~~characterized in that~~ wherein the feeler line support path is determined during a time T broken down into a pilot reaction time T_{reac} , a time T_{pull} for placing the aircraft on a horizontal path and a time T_{roll} for placing the aircraft in a roll.

3. (currently amended): The method as claimed in ~~any one of the preceding~~ claim[[s]] 1, ~~characterized in that~~ wherein an area to be sensed to the right and/or to the left is defined according to rings succeeding one another, each ring presenting a diameter D in the form $D = d + \text{safety margin}$, d being the diameter of a circular avoidance maneuver.

4. (currently amended): The method as claimed in ~~any one of the preceding claim~~[[s]] 1, ~~characterized in that~~ wherein the areas to be sensed are defined according to the current straight-line or turning path of the aircraft.

5. (currently amended): The method as claimed in ~~any of the preceding claim~~[[s]] 1, ~~characterized in that~~ wherein it ~~comprises~~ comprising a step prior to step b) ~~of consisting in~~ parameterizing the areas so that the relief underlying these areas can be sensed.

6. (currently amended): The method as claimed in ~~the preceding claim~~ 5, ~~characterized in that~~ wherein the areas and the relief are parameterized according to a grid reference.

7. (currently amended): The method as claimed in ~~any one of the preceding claim~~[[s]] 1, ~~characterized in that~~ wherein the dangerous sub-zones of step b) are identified according to a second hypothetical path of the aircraft such that:

if the aircraft is ascending, the ascent is stopped immediately,
in other cases, the path is continued unchanged.

8. (currently amended): The method as claimed in ~~any one of the preceding claim~~[[s]] 1, ~~characterized in that~~ wherein the time ΔT of step c) is computed according to a hypothetical flight time toward a dangerous sub-zone, calculated according to a time T_{pull} to place the aircraft in a horizontal path and a time T_{roll} to place the aircraft in a roll:

in a horizontal plane when the aircraft is ascending or flying level,
in a horizontal plane and in a vertical plane when the aircraft is descending.

9. (currently amended): The method as claimed in ~~any one of the preceding claim~~[[s]] 1, ~~characterized in that~~ wherein step d) comprises a step for comparing ΔT right and/or ΔT left with one or more predefined times.

10. (currently amended): The method as claimed in ~~any one of the preceding claim~~[[s]] 1, ~~characterized in that~~ wherein step d) comprises a step ~~consisting in~~ of determining the time

remaining for the safest side (best lateral) (safer) from the maximum between ΔT right and/or ΔT left and the time remaining for the least safe side (worst lateral) (less) from the minimum between ΔT right and/or ΔT left.

11. (currently amended): The method as claimed in ~~any one of the preceding~~ claim[[s]] 1, ~~characterized in that~~ wherein it comprises a step consisting in generating a lateral avoidance maneuver.

12. (currently amended): An aircraft navigation aid device [[(1)]], comprising a mass memory [[(2)]] designed to store a terrain database, a program memory [[(3)]] comprising an application program of the method as claimed in ~~any one of the preceding~~ claim[[s]] 1, a central processing unit [[(4)]] designed to run the program and an input-output interface [[(5)]].

13. (new): The method as claimed in claim 2, wherein an area to be sensed to the right and/or to the left is defined according to rings succeeding one another, each ring presenting a diameter D in the form $D = d + \text{safety margin}$, d being the diameter of a circular avoidance maneuver.

14. (new): The method as claimed in claim 2, wherein the areas to be sensed are defined according to the current straight-line or turning path of the aircraft.

15. (new): The method as claimed in claim 3, wherein the areas to be sensed are defined according to the current straight-line or turning path of the aircraft.

16. (new): The method as claimed in claim 3, wherein it comprising a step prior to step b) of parameterizing the areas so that the relief underlying these areas can be sensed.

17. (new): The method as claimed in claim 2, wherein the dangerous sub-zones of step b) are identified according to a second hypothetical path of the aircraft such that:

if the aircraft is ascending, the ascent is stopped immediately,
in other cases, the path is continued unchanged.

18. (new): The method as claimed in claim 2, wherein the time ΔT of step c) is computed according to a hypothetical flight time toward a dangerous sub-zone, calculated according to a time T_{pull} to place the aircraft in a horizontal path and a time T_{roll} to place the aircraft in a roll:

in a horizontal plane when the aircraft is ascending or flying level,
in a horizontal plane and in a vertical plane when the aircraft is descending.

19. (new): The method as claimed in claim 3, wherein the time ΔT of step c) is computed according to a hypothetical flight time toward a dangerous sub-zone, calculated according to a time T_{pull} to place the aircraft in a horizontal path and a time T_{roll} to place the aircraft in a roll:

in a horizontal plane when the aircraft is ascending or flying level,
in a horizontal plane and in a vertical plane when the aircraft is descending.

20 (new): The method as claimed in claim 7, wherein the time ΔT of step c) is computed according to a hypothetical flight time toward a dangerous sub-zone, calculated according to a time T_{pull} to place the aircraft in a horizontal path and a time T_{roll} to place the aircraft in a roll:

in a horizontal plane when the aircraft is ascending or flying level,
in a horizontal plane and in a vertical plane when the aircraft is descending.